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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,896	05/01/2001	Richard Hayton	2006579-0127 (CTX -064)	5902

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TWO INTERNATIONAL PLACE  
BOSTON, MA 02110

EXAMINER

CAO, DIEM K

ART UNIT PAPER NUMBER

2194

DATE MAILED: 02/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/846,896	Applicant(s) HAYTON ET AL.	
	Examiner Diem K. Cao	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-11,13-19,22-24,26-34 and 40-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

*William Thomson*  
**WILLIAM THOMSON**  
**SUPERVISORY PATENT EXAMINER**

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/14/2005</u> | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-48 are pending. Applicant has amended claims 1 and 24.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/14/2005 has been entered.

#### ***Allowable Subject Matter***

3. Claims 2, 12-16, 20-21, 25, 35-39 and 43-44 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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**5. Claims 1, 6-11, 17-18, 22-24, 29-34, 40-41, and 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burd et al. (U.S. 6,792,607 B1) in view of Marcos et al. (U.S. 6,429,880 B2).**

6. As to claim 1, Burd teaches an application having a plurality of objects (server-side control objects; col. 5, lines 1-25), at least one object having a property (the server-side Control class ... properties and events; col. 19, line 58 – col. 20, line 2), each property being identified with an identifier (page:tablelist1:listrow2:label1; col. 14, lines 49-54), associating an element of the user-interface with a property path (one or more server-side control objects map to one or more user interface element; col. 6, line 66 – col. 7, line 2 and Operation 508 parses the payload ... for processing; col. 14, lines 49-65), the property path including a concatenation of a plurality of identifiers (page, tablelist1, listrow2, label1; col. 14, lines 49-54), the concatenation of identifiers defining a path through a plurality of application objects of the application to a property at the end of the concatenation (the property values of server-side control objects or corresponding data, i.e., “12945”; col. 14, lines 49-67 and Figs. 6-7), mapping the property path to a current state of the property at the end of the path defined by the concatenation of identifiers, to associated the element of the user-interface with the current state of that property (a unique identifier and corresponding data; col. 14, lines 49-58 and Figs. 1, 6, 7), detecting a change in a state of a property mapped to one of the plurality of concatenated identifiers defining the property path (During the data binding ... container property; col. 15, lines 50-53), the change made on one of a local machine and a remote machine (col. 15, lines 1-6. It is note that the claim language recites “one of a local machine and a remote machine”, thus, meeting one of the two

would meet the language of the claimed limitation. In this case, the change is made on a local machine, i.e., client machine), updating the element of the user-interface associated with the property path responsive to the detected change (user interface elements ... data binding operation 512; col. 15, lines 53-58).

7. However, Burd does not teach components. Marcos teaches components (components; col. 9, lines 35-51).

8. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Burd and Marcos because it provides a method for binding user interface objects to application objects, and both objects or components are software objects that provide properties and methods to act on the properties, and it is easier for developers during application creation and maintain.

9. As to claim 6, Burd as modified teaches monitoring a plurality of states within the application to detect a change in one of the states (server side control objects can ... registered for those events; col. 10, lines 60-67), each state in the plurality corresponding to one of the states mapped to an identifier in the concatenation of the property path (one or more server-side control objects map to one or more user interface element; col. 6, line 66 – col. 7, line 2 and Operation 508 parses the payload ... for processing; col. 14, lines 49-65, page:tablelist1:listrow2:label1; col. 14, lines 49-54, a unique identifier and corresponding data; col. 14, lines 49-58 and Figs. 1, 6, 7).

10. As to claim 7, Burd and Marcos do not teach receiving a property change event from a JavaBean-compatible component. Burd teaches receiving a property change event from a server-side control object (col. 10, lines 60-67), and Java programming language can be used (col. 9, line 66 – col. 10, line 2). It is well known in the art that JavaBean is a product of Sun, and it would have been obvious to apply Java technology to the system of Burd and Marcos because Java provides a platform independent application.

11. As to claim 8, Burd does not teach re-mapping the property path to a new current state in response to detecting the change in one of the states of the plurality of states. Marcos teaches a GUI element can be bound to a variable, method or constant (col. 4, lines 21-22), a dynamic element is an element that is replaced with dynamically generated HTML at runtime (col. 7, lines 1-2), and the system also automatically identifying and displaying all the possible variables that are available for binding to a definitional element (col. 11, lines 61-64). When a variable for a definitional element is changed during runtime, the path to a new value of the new variable also changed.

12. As to claim 9, Burd does not teach re-mapping the identifier the concatenation of identifier to the changed state in response to detecting the change in one of the states of the plurality of states. Marcos teaches a GUI element can be bound to a variable, method or constant (col. 4, lines 21-22), the system also automatically identifying and displaying all the possible variables that are available for binding to a definitional element (col. 11, lines 61-64), and the

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value attribute of the HTML INPUT element in the component is bound to the aGuest.name variable in the component's script, wherein aGuest.name is the identifier to the variable. When a new variable or method is bound to the GUI element, a new identifier is replaced in the property path to reflect the change in state.

13. As to claim 10, Burd as modified teaches generating a property change message in response to a change in a state of a property corresponding to one of the identifiers in the concatenation of the property path (server-side objects can raise server-side events to non-user-interface server components registered for those events; col. 10, lines 60-63).

14. As to claim 11, Burd as modified teaches updating one or more user-interface elements associated with the property path with a new current state in response to a change in the current state of the property (e.g. col. 10, lines 56-67 and col. 15, lines 41-46).

15. As to claim 17, Burd as modified teaches dynamically binding the property path to one of the application components including the property corresponding to the current state mapped to that property path (The HTTP request ... dynamic content resource; col. 8, lines 15-23, col. 9, lines 53-62, and col. 10, lines 14-17).

16. As to claim 18, Burd as modified teaches transmitting to the application a request to update the current state of the property mapped to the property path associated with the element

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of the user-interface in response to a user modification of the value (e.g. col. 8, lines 30-36 and col. 10, lines 60-67).

17. As to claim 22, Burd as modified teaches registering interest in the property path (e.g. col. 15, lines 1-20 and col. 10, lines 60-63).

18. As to claim 23, Burd as modified teaches the step of mapping further comprises mapping one of the identifiers in the concatenation of the property path to a state of a property corresponding to the one of the identifiers (See Fig. 1, 6-7, page:tablelist1:lstrow2:label1 and a unique identifier and corresponding data; col. 14, lines 49-58).

19. As to claim 24, it is the same as the method claim of claim 1, except it is a computer system claim and is rejected under the same ground of rejection.

20. As to claims 29-34, see rejections of claims 6-11 above.

21. As to claims 40-41, see rejections of claims 17-18 above.

22. As to claims 45-46, see rejections of claims 22-23 above.

23. As to claim 47, Burd as modified teaches the client node including a user interface having one or more elements (Fig. 1). However, Burd does not teach the client node including a client



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portion of the property connector module. Marcos teaches the client node including a client portion of the property connector module (component window; col. 9, line 30 – col. 10, line 19).

24. As to claim 48, Burd as modified teaches the server node including the application, and a server portion of the property connector module (server-side class control library; col. 6, lines 62-66, non-user-interface server component 130; col. 7, lines 46-48).

**25. Claims 3-5, 19, 26-28 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burd et al. (U.S. 6,792,607 B1) in view of Marcos et al. (U.S. 6,429,880 B2) further in view of Turner et al. (U.S. 2001/0018648 A1).**

26. As to claim 3, Burd and Marcos do not teach the step of mapping the property path to the current state further comprises mapping the property path to an undefined state if no property is found that corresponds to an identifier in the plurality of identifiers in the concatenation. Turner teaches a property of a component may not be required (section 0167; page 7 and section 0176; page 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Burd, Marcos and Turner because it provides a method to reduce the time of application development by providing a design tool for assembling component objects to form an object-based computer system application.

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27. As to claim 4, Burd and Turner teaches generating a node tree having a plurality of nodes, wherein each node of the node tree represents a mapping of an identifier to one of a state of a property and an undefined state (See fig. 7 and rejection of claim 3 above).

28. As to claim 5, Burd teaches the node tree represents a plurality of property path (page:tablelist1:listrow2:label1; col. 14, lines 49-54 and Fig. 7).

29. As to claim 19, Turner teaches inhibiting a property change message in response to the application updating the current state of the property in response to the request to update (If the user supplies a new value ... take the new value; section 0578, page 22).

30. As to claims 26-28, see rejections of claims 3-5 above.

31. As to claim 42, see rejection of claim 19 above.

### ***Response to Arguments***

32. Applicant's arguments filed 11/14 2005 have been fully considered but they are not persuasive.

As to Applicant's arguments regarding Burd and Marcos does not teach the limitation "the change made on one of a local machine and a remote machine", that the reference of Burd teaches the change is made on the local machine (client machine), not the remote machine (server application on the server), examiner respectfully traverses the arguments, since the

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language of the claim use “one of”, examiner need to meet only one of the two, in this case, Burd teaches the change is made on the local machine, thus, it meets the claimed limitation. If Applicant believes the subject of detecting a change in the server application, and update the change in the user interface element of the client in response to that detecting, is an important aspect of the invention, than it should be presented in the claim in such a clear way to assist examiner in the process of examine the case.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K. Cao whose telephone number is (571) 272-3760. The examiner can normally be reached on Monday - Friday, 5:30AM - 2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


**Any response to this action should be mailed to:**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

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Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist at 571-272-2100.

Diem Cao

  
WILLIAM THOMSON  
SUPERVISORY PATENT EXAMINER